

CLAIMS:

1. Record carrier of a writable type for recording information by writing marks in a track on a recording layer via a beam of radiation entering through an entrance face of the record carrier and constituting a scanning spot having an effective diameter on the track,
 - the marks having lengths corresponding to an integer number of channel bit lengths T and
 - 5 the shortest marks having a length of a predefined minimum number d of channel bit lengths T for being detectable via the scanning spot having said effective diameter,
 - the recording layer comprising a pregroove (14) for indicating the track, the pregroove exhibiting a wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, and the pregroove comprising a pregroove modulation of the depth and/or width of pregroove areas for constituting a carrier pattern containing long marks (18,19),
 - 10 - the long marks having lengths of at least two times the predefined minimum number d of channel bit lengths T for being substantially longer than the effective diameter of the scanning spot, and
 - 15 - the carrier pattern constituting a focus area (12) at a predefined location on the recording layer.
2. Record carrier as claimed in claim 1, wherein the pregroove modulation comprises pregroove land areas (19) of zero depth alternating with pregroove pit areas (18) of
- 20 a predefined depth and width for constituting said carrier pattern.
3. Record carrier as claimed in claim 1 or 2, wherein the record carrier comprises at least a first recording layer (40) and a second recording layer (41), the first recording layer being present at a position closer to the entrance face than the second recording layer, and
- 25 each recording layer having the focus pattern (12).
4. Record carrier as claimed in claim 3, wherein each recording layer comprises the focus pattern (12) at a substantially corresponding radial position.

5. Record carrier as claimed in claim 1, wherein the predefined minimum number d is 3 channel bit lengths T ($d = 3T$), and the long marks have lengths of at least $6T$, in particular the lengths being in the range of $8T$ to $14T$.

5 6. Record carrier as claimed in claim 1, wherein the carrier pattern substantially only contains said long marks.

7. Record carrier as claimed in claim 1, wherein the pregroove modulation is representing additional information encoded by the long marks according to a predefined 10 channel coding algorithm, which predefined channel coding algorithm differs from a channel coding algorithm representing said recorded information.

8. Device for scanning a track on a record carrier (11) via a beam of radiation (24), the track comprising marks on a recording layer, the beam entering through an entrance 15 face of the record carrier and constituting a scanning spot having an effective diameter on the track, the marks having lengths corresponding to an integer number of channel bit lengths T and the shortest marks having a length of a predefined minimum number d of channel bit lengths T for being detectable via the scanning spot having said effective diameter, the recording layer comprising a pregroove for indicating the track, the pregroove exhibiting a 20 wobble constituted by displacements of the pregroove in a direction transverse to the longitudinal direction of the track, and the pregroove comprising a pregroove modulation of the depth and/or width of pregroove areas for constituting a carrier pattern containing long marks, the long marks having lengths of at least two times the predefined minimum number d of channel bit lengths T for being substantially longer than the effective diameter of the 25 scanning spot, and the carrier pattern constituting a focus area at a predefined location on the recording layer,
the device comprising
- a head (22) for providing the beam,
- focus servo means (25) for focusing the beam on the track for constituting said scanning 30 spot,
- a front-end unit (31) for generating a scanning signal (33) for detecting marks in the track, and

- a focus adjustment unit (32) for locating the focus area and for adjusting the focus servo means in dependence on an amplitude of the scanning signal due to the carrier pattern during scanning the focus area.

5 9. Device as claimed in claim 8, wherein the focus servo means (25) are arranged for focusing on one of at least a first recording layer (40) and a second recording layer (41) in the record carrier, the first recording layer being present at a position closer to the entrance face than the second recording layer, and each recording layer having the focus pattern, and the focus adjustment unit (32) being arranged for, for each recording layer separately,

10 10. locating the focus area and adjusting the focus servo means (25) in dependence on an amplitude of the scanning signal due to the carrier pattern during scanning the focus area of the respective layer.

15 10. Device as claimed in claim 8, wherein the focus adjustment unit (32) is arranged for writing a focus test pattern and for further adjusting the focus servo means (25) in dependence on jitter or errors detected during subsequently reading said test pattern.

11. Device as claimed in claim 8, wherein the device comprises a pregroove demodulation unit (34) for retrieving, from the scanning signal, additional information encoded in the pregroove modulation according to a predefined channel coding algorithm, which predefined channel coding algorithm differs from a channel coding algorithm representing said recorded information.